Waste Discharge Permit Application

Application is hereby made for a permit to discharge wastes into the Municipality of Metropolitan Seattle sewer system in accordance with RCW 90.48.165, RCW 35.58.180, RCW 35.58.200, RCW 35.50.360 and Metro Resolution 3374.

Section A — General Information:

1. Company Name Duwamish Shipyard, Inc.
2. Mailing Address 5658 West Marginal Way S.W. Seattle, WA 98106
3. Location of plant discharging wastes if different from above
4. Name, title, address and telephone number of person to contact concerning information in this questionnaire:

Name E.R. Graves Title Chief Engineer

Address 5658 West Marginal Way S.W. Phone No. 767-4880

City Seattle State WA Zip 98106

Section B — Product or Service Information:

1. Brief description of manufacturing or service at plant address:
   High pressure water wash of marine vessels

2. Raw materials and chemicals used in processes:

Brand Name	Chemical, scientific or actual name	*Quantities Average	Used per day Maximum
None			

3. Describe how raw chemicals and hazardous materials are stored. Have steps been taken to ensure that spills resulting from accidental spillage or ruptured containers will not enter a waterway or sewer?
   Please refer to Duwamish Shipyard's "Spill Prevention, Control and Countermeasures Plan".

4. Products manufactured or processed:

	Product	*Quantity and Unit Average	Maximum
1.	None		
2.			
3.			
4.			
5.			

Section C — Plant Operational Characteristics:

1. Plant Operations:

	Days per year	Number of employees per shift Day	Night	Swing
Average	360	75	-	10
Maximum		150	-	30

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2. Explain any seasonal variation you may have in waste discharge volumes, plant operations, raw materials and chemicals used in processes and/or production:

Little or no seasonal change.

3. Describe in detail the sources of all industrial wastes within your industry. Describe in detail the treatment given each of these wastes. Include in this description the disposal methods used for these wastes and also for any sludge collected by your waste treatment system. Include a schematic flow diagram showing the sources of all wastes and their flow pattern. Include this information with your application as Exhibit 1.

4. Metal finishing and metal etching industries: Give a breakdown of capacity and number of tanks by solution type, concentration and estimated dragout. Identify tanks containing significant quantities of phosphorus, nitrogen, heavy metals, cyanide and etching solutions that concentrate heavy metals. Describe what precautions have been taken to contain and prevent discharge of plating solutions spilled as a result of ruptured or leaking tanks. Include this information with your application as Exhibit 2. None

Section D — Water Consumption and Loss:

1. Source of supply Metro

2. List water consumption within the plant:

	Average gallon/day	Maximum gallon/day
a. Industrial processing	N.A.	N.A.
b. Cooling	N.A.	N.A.
c. Boiler feed	N.A.	N.A.
d. Water incorporated into product	N.A.	N.A.
e. Other (specify)	N.A.	N.A.

Raw water treatment (specify water conditioning chemicals used) None

3. List discharge or water losses to:

	Average gallon/day	Maximum gallon/day
a. Municipal sewer (industrial and sanitary wastewater)	N.A.	3500 *
b. Surface waters and storm sewers (specify)	N.A.	N.A.
c. Waste haulers	N.A.	N.A.
d. Evaporation	N.A.	N.A.

4. Describe all wastewater treatment equipment or processes in use: None

5. Planned waste treatment improvements should be submitted on a separate sheet as Exhibit 3. Describe any additional treatment or changes in waste disposal methods in planning or under construction.

6. Give any additional information or comments you feel necessary to clarify this application as Exhibit 3. Include all information for previous questions, where additional space is necessary, as part of Exhibit 3.

7. The information given on this application is correct and accurate to the best of my knowledge.

Edson R. Graves
Signature

E.R. Graves
Printed Name

July 6, 1990
Date

Chief Engineer
Title

*Please specify units. For example: tons/day, pounds/day, barrels/day, etc.

DUWAMISH SHIPYARD INC.
5658 W. MARGINAL WAY S.W. • SEATTLE, WA 98106 • (206) 767-4880 • FAX: (206) 767-5867

Municipality of Metropolitan Seattle
Waste Discharge Permit Application

Exhibit #1

The four major wastes created at Duwamish Shipyard are solvents, oils, sandblast grit and hydroblast wash water.

SOLVENTS: The solvents are distilled on site. The waste sludge is collected and removed by Vanwaters and Rogers, Inc. for disposal. The sludge is not treated and none is discharged into the sewer.

OILS AND BILGE WATERS: These wastes are collected by a local marine tank cleaner and removed for disposal. This waste is not treated by the shipyard nor discharged into the sewer.

SAND BLAST GRIT: The sand blast grit is removed from the shipyard by Industrial Services, Inc. (Western Services, Inc.) for disposal. None is introduced into the sewer system.

HYDROBLAST: The hydroblast waste water is generated by high pressure water washing of marine vessels. This washing primarily removes marine growth, along with loose paint and scale in preparation for repainting. No grit is introduced into the blast water in this operation.

Each washing generated approximately a 3,000 - 4,000 gallon batch of effluent. Size of batch, of course, depends on size of vessel and condition of the bottom. Our record for the last 10 years show an average of 1.2 vessels per month being hydroblasted. It is not expected that this value will change in the foreseeable future.

Chemical analysis for the hydroblast effluent is found in Exhibit #3.